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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,913	01/30/2001	David Northway	PALM-3571.US.P	5444

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EXAMINER

OSORIO, RICARDO

ART UNIT	PAPER NUMBER
2673	6

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,913

Applicant(s)

NORTHWAY, DAVID

Examiner

RICARDO L OSORIO

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 10-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coulon et al (5,712,760) in view of Kamikakai et al (6,154,359) and Leman (6,215,419).

Regarding claims 1 and 10, Coulon teaches of a computer system having a portable computer (Fig. 3a, reference character 302) and a segmented keyboard for providing user inputted data for said portable computer and coupled to said computer, comprising a compliment of input keys comprising a segmented keyboard (Fig. 2b, reference character 226); a central keyboard portion (Fig. 3a, reference character 306); a first flippable portion (Fig. 3a, reference character 310) hinged to said central portion and having an open and closed position; a second flippable portion (Fig. 3a, reference character 312) hinged to said central portion and having an open and closed position; a numeric keypad, adapted to be coupled with a flippable hinged portion of said segmented keyboard (Fig. 3a, reference character 326, these keys are clearly the numeric keypad keys of a standard keyboard); a first rotatable hinge, or a rotatable hinge coupled with said segmented keyboard (Fig. 3a, reference character 314); and an electrical connector coupled to the first rotatable hinge (col. 6, lines 9-12).

Art Unit: 2673

However, Coulon fails to teach of a second rotatable hinge coupled with said first rotatable hinge.

Kamikakai teaches teach of a second rotatable hinge coupled with said first rotatable hinge (col. 3, lines 56-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the second rotatable hinge, as taught by Kamikakai, in the device of Coulon so that the display part and the keyboard part can turn independently of each other (col. 5, lines 43-47).

Further, the combined device of Coulon and Kamikakai fail to teach of an a attachable numeric input keypad adapted to be optionally coupled with a flappable hinged portion of said segmented keyboard.

Leman teaches of a stackable, or segmented, keyboard having a keypad, which could be a numeric keypad (see Fig. 9) that is adapted to be optionally coupled with a flappable hinged portion of said segmented keyboard (see Fig. 6 and col. 7, lines 46-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the optionally coupled keypad, as taught by Leman, in the combined device of Coulon and Kamikakai to optionally have the keyboard portions fixed relative to each other to have use conventional keyboard model, or separate, in multiple arrangements and under a variety of circumstances, as desired by the user to have a more comfortable and ergonomic keyboard (see Leman, col. 6, lines 26-44).

Art Unit: 2673

Regarding claims 2 and 11, Coulon teaches that said electrical connector is adapted to couple said segmented keyboard with a portable computer system (col. 6, lines 9-12).

Regarding claims 3 and 12, Coulon teaches that when said first flippable portion and said second flippable portion are in said open position a compliment of input keys are accessible to a user for said inputting of data (see Fig. 3a, reference characters 310 and 312).

Regarding claims 4 and 13, Coulon teaches that when said first flippable portion and said second flippable portion are in closed position, said segmented keyboard is of a size and shape approximate to the size and shape of a portable computer system (Figs 3b-3c, and col. 6, lines 17-21).

Regarding claims 5, 7, 14 and 16, the device of Coulon fails to teach of the first rotatable hinge adapted to provide angular positioning of said segmented keyboard to enable optimum ergonomic positioning of said segmented keyboard relative to an individual user.

Kamikakai teaches of the first rotatable hinge adapted to provide angular positioning of said segmented keyboard to enable optimum ergonomic positioning of said segmented keyboard relative to an individual user (col. 2, lines 39-54, and col. 3, lines 56-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide angular positioning of said segmented keyboard, as taught by Kamikakai, in the device of Coulon because the keyboard portion can turn independently to arbitrary rotary positions that include optimum ergonomic positions (col. 5, lines 43-47). Also, to enable easy operation of a palmtop information processing apparatus (col. 2, lines 49-54).

Regarding claims 6, 8, 15, 17 and 19, further, the device of Coulon fails to teach of the second rotatable hinge adapted to provide angular positioning of a portable computer system when said

Art Unit: 2673

portable computer system is coupled to said segmented keyboard to enable optimum view angle positioning of the display panel of said portable computer system relative to an individual user.

Kamikakai teaches of the second rotatable hinge adapted to provide angular positioning of a portable computer system when said portable computer system is coupled to said segmented keyboard to enable optimum view angle positioning of the display panel of said portable computer system relative to an individual user (col. 2, lines 39-54, and col. 3, lines 56-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide optimum view angle positioning of the display panel, as taught by Kamikakai, in the device of Coulon because the display portion can turn independently to arbitrary rotary positions that include optimum viewing positioning (col. 5, lines 43-47). Also, to enable easy operation of a palmtop information processing apparatus (col. 2, lines 49-54).

3. Claims 9, 18 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Coulon in view of Kamikakai and Leman as applied to claims 1-8, 10-17 and 19 above, and further in view of Wahl et al (6,101,676).

Regarding claims 9, 18 and 20, the device of Coulon, as anticipated by Kamikakai and Leman, fails to teach that the first and second rotatable hinges are clutch hinges adapted to maintain optimum ergonomic positioning of said segmented keyboard and optimum view angle positioning of a display panel of a portable computer system with regard to an individual user. Wahl teaches of the use of clutch hinges that can be used to maintain optimum ergonomic positioning of said segmented keyboard and optimum view angle positioning of a display panel of a portable computer system with regard to an individual user (col. 1, lines 22-42).

Art Unit: 2673

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use clutch hinges, as taught by Wahl, in the combined device of Coulon, Kamikakai and Leman to reduce the amount of force necessary to adjust the angular position of the display housing (col. 1, lines 39-42). Also, the same can clearly be said of the angular position of the keyboard part to get an optimum ergonomic position.

Response to Arguments

4. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is (703) 305-2248. The examiner can normally be reached on Mon-Thu from 7:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 305-4938.

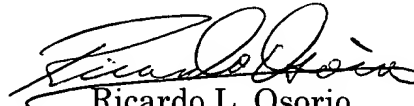
Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Ricardo L. Osorio
Examiner
Art Unit: 2673

RLO
December 15, 2003